

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A stent delivery system comprising:
a catheter;
a balloon operably attached to the catheter; and
a stent disposed on the balloon;
a silane layer disposed on the stent; and
a polymer coating disposed on the silane layer, the coating being a non-biologically active polymer.

Claim 2 (previously presented): The stent delivery system of claim 1 wherein the polymer coating includes a therapeutic agent.

Claim 3 (cancelled):

Claim 4 (original): The stent delivery system of claim 1 wherein the silane layer is selected from the group consisting of a monolayer, a multilayer, and a bulk phase layer.

Claim 5 (original): The stent delivery system of claim 1 wherein the stent is a stainless steel stent.

Claim 6 (currently amended): A coated stent comprising:
a stent;
a silane layer disposed on the stent; and
a polymer coating disposed on the silane layer, the coating being a non-biologically active polymer.

Claim 7 (previously presented): The coated stent of claim 6 wherein the polymer coating includes a therapeutic agent.

Claim 8 (cancelled):

Claim 9 (original): The coated stent of claim 6 wherein the silane layer is selected from the group consisting of a monolayer, a multilayer, and a bulk phase layer.

Claim 10 (original): The coated stent of claim 6 wherein the stent is a stainless steel stent.

Claim 11 (withdrawn): A method for producing a stent comprising:
providing a stent;
mixing silane with alcohol to form a silane solution;
applying the silane solution to the stent; and
curing the silane solution on the stent to form a silane layer.

Claim 12 (withdrawn): The method of claim 11 further comprising applying a coating to the silane layer.

Claim 13 (withdrawn): The method of claim 12 wherein the coating includes a therapeutic agent.

Claim 14 (withdrawn): The method of claim 12 wherein the coating is a polymer.

Claim 15 (withdrawn): The method of claim 11 wherein the stent is a stainless steel stent.

Claim 16 (withdrawn): The method of claim 11 wherein the silane is an amino silane.

Claim 17 (withdrawn): The method of claim 11 wherein the silane is selected from the group consisting of trimethoxysilylpropyl-diethylenetriamine; 3 aminopropyltrimethoxysilane; n-styrylmethyl 2 aminoethylamino propyl trimethoxysilane; vinyl trimethoxysilane; methacryloxypropyltrimethoxysilane; 3 (n-styrylmethyl-2-aminoethylaminopropyltrimethoxysilane); and 3 (glycidoxypyropyl)-trimethoxysilane.

Claim 18 (withdrawn): The method of claim 11 wherein the alcohol is selected from the group consisting of isopropyl alcohol, methyl alcohol, and ethyl alcohol.

Claim 19 (withdrawn): The method of claim 11 wherein mixing silane with alcohol to form a silane solution further comprises mixing silane with alcohol to form a silane solution of about 2 to 30 % silane.

Claim 20 (withdrawn): The method of claim 11 wherein mixing silane with alcohol to form a silane solution further comprises mixing silane with alcohol to form a silane solution of about 5% silane.

Claim 21 (withdrawn): The method of claim 11 wherein applying the silane solution to the stent further comprises dipping the stent in the silane solution.

Claim 22 (withdrawn): The method of claim 11 wherein applying the silane solution to the stent further comprises spraying the stent with the silane solution.

Claim 23 (withdrawn): The method of claim 11 wherein applying the silane solution to the stent further comprises applying the silane solution at a temperature between about 20 to 70 deg.C for a time of between about 1 and 60 minutes.

Claim 24 (withdrawn): The method of claim 11 wherein applying the silane solution to the stent further comprises applying the silane solution at a temperature of about 35 deg.C for a time of about 15 minutes.

Claim 25 (withdrawn): The method of claim 11 wherein curing the silane solution on the stent to form a silane layer further comprises curing the silane solution in an inert atmosphere.

Claim 26 (withdrawn): The method of claim 11 wherein curing the silane solution on the stent to form a silane layer further comprises curing the silane solution at a temperature between about 25 to 115 degrees C for a time of between 1 to 24 hours.

Claim 27 (withdrawn): The method of claim 11 wherein curing the silane solution on the stent to form a silane layer further comprises curing the silane solution at a temperature of about 60 degrees C for a time of about 3 to 15 hours.

Claim 28 (withdrawn): A system for producing a stent comprising:
means for providing a stent;
means for mixing silane with alcohol to form a silane solution;
means for applying the silane solution to the stent; and
means for curing the silane solution on the stent to form a silane layer.

Claim 29 (cancelled):

Claim 30 (withdrawn): The system of claim 28 wherein means for applying the silane solution to the stent further comprises means for dipping the stent in the silane solution.

Claim 31 (cancelled):

Claim 32 (withdrawn): The system of claim 28 wherein the means for curing the silane solution on the stent to form a silane layer further comprises means for curing the silane solution in an inert atmosphere.

Claim 33 (currently amended): A coated stent comprising:
a stainless steel stent;
an amino silane layer disposed on the stainless steel stent;
a polymer coating disposed on the amino silane layer, the polymer coating being a non-biologically active polymer including a therapeutic agent.

Claim 34 (previously presented): The stent delivery system of claim 1 wherein thickness of the silane layer is 8-10 monolayers.

Claim 35 (previously presented): The coated stent of claim 6 wherein thickness of the silane layer is 8-10 monolayers.

Claim 36 (new): The stent delivery system of claim 1 wherein the non-biologically active polymer is selected from the group consisting of urethane, polyester, epoxy, polycaprolactone (PCL), polymethylmethacrylate (PMMA), PEVA, PBMA, PHEMA, PEVAc, PVAc, Poly N-Vinyl pyrrolidone, Poly (ethylene-vinyl alcohol), and combinations thereof.

Claim 37 (new): The coated stent of claim 6 wherein the non-biologically active polymer is selected from the group consisting of urethane, polyester, epoxy, polycaprolactone (PCL), polymethylmethacrylate (PMMA), PEVA, PBMA, PHEMA, PEVAc, PVAc, Poly N-Vinyl pyrrolidone, Poly (ethylene-vinyl alcohol), and combinations thereof.